

What is claimed is:

1. A method comprising the steps of:
 - detecting an expression level of midkine gene in a biological sample isolated from a mammal of interest; and
 - comparing the expression level to a reference expression level of said midkine gene in at least one control sample.
2. The method of claim 1, wherein said at least one control sample is isolated from at least one control mammal, wherein said at least one control mammal does not have systemic lupus erythematosus or lupus nephritis.
3. The method of claim 2, wherein the mammal of interest has systemic lupus erythematosus or lupus nephritis.
4. The method of claim 2, wherein the expression level and the reference expression level are detected using an antibody directed against a product of said midkine gene.
5. The method of claim 2, wherein the expression level and the reference expression level are detected by measuring the level of an RNA transcript of said midkine gene.
6. The method of claim 2, wherein the biological sample is selected from the group consisting of a tissue sample, a urine sample, and a blood sample.
7. The method of claim 2, wherein the biological sample and said at least one control sample are kidney samples.
8. The method of claim 2, wherein the mammal of interest is a human.
9. A pharmaceutical composition for preventing or treating systemic lupus erythematosus or lupus nephritis, comprising a pharmaceutically acceptable carrier and an agent that modulates a midkine activity or midkine gene expression.
10. The pharmaceutical composition of claim 9, wherein the agent inhibits said midkine activity or midkine gene expression.
11. The method of claim 9, wherein the agent is selected from the group consisting of a polypeptide, a polynucleotide, a polysaccharide, a small organic molecule, and an inorganic molecule.
12. The pharmaceutical composition of claim 11, wherein the agent is an antibody that binds specifically to a midkine gene product.
13. The pharmaceutical composition of claim 11, wherein the agent is an antisense polynucleotide to midkine gene.

14. The pharmaceutical composition of claim 9, wherein the agent is a gene therapy vector capable of producing *in vivo* a polypeptide or a polynucleotide that modulates said midkine activity or midkine gene expression.

15. The pharmaceutical composition of claim 9, wherein the agent is a polynucleotide capable of inhibiting said midkine gene expression by RNAi.

16. The pharmaceutical composition of claim 15, wherein the polynucleotide comprises a siRNA sense strand or a siRNA antisense strand selected from Table 2.

17. A method comprising the step of introducing into a mammal in need thereof an effective amount of the pharmaceutical composition of claim 10.

18. A method of identifying an agent capable of binding to midkine or a variant thereof, comprising:

contacting a polypeptide comprising an amino acid sequence recited in SEQ ID NO:1 or a variant of the polypeptide with a candidate agent; and

determining a binding affinity of the candidate agent to said polypeptide or the variant of said polypeptide.

19. The method of claim 18, wherein said polypeptide, the variant of said polypeptide, or the candidate agent includes a label group.

20. A method of identifying an agent capable of modulating an activity of midkine or a variant thereof, comprising:

contacting a polypeptide comprising the amino acid sequence of SEQ ID NO:1 or a variant of said polypeptide with a candidate agent; and

comparing an activity of said polypeptide or the variant of said polypeptide in the presence of said candidate agent to an activity of said polypeptide or the variant of said polypeptide in the absence of said candidate agent.

21. A kit for diagnosing systemic lupus erythematosus or lupus nephritis, said kit comprising at least one of:

(a) a polynucleotide probe capable of hybridizing under stringent conditions to a polynucleotide encoding the amino acid sequence depicted in SEQ ID NO:1, or the complement thereof; and

(b) an antibody capable of specifically binding to the amino acid sequence depicted in SEQ ID NO:1.